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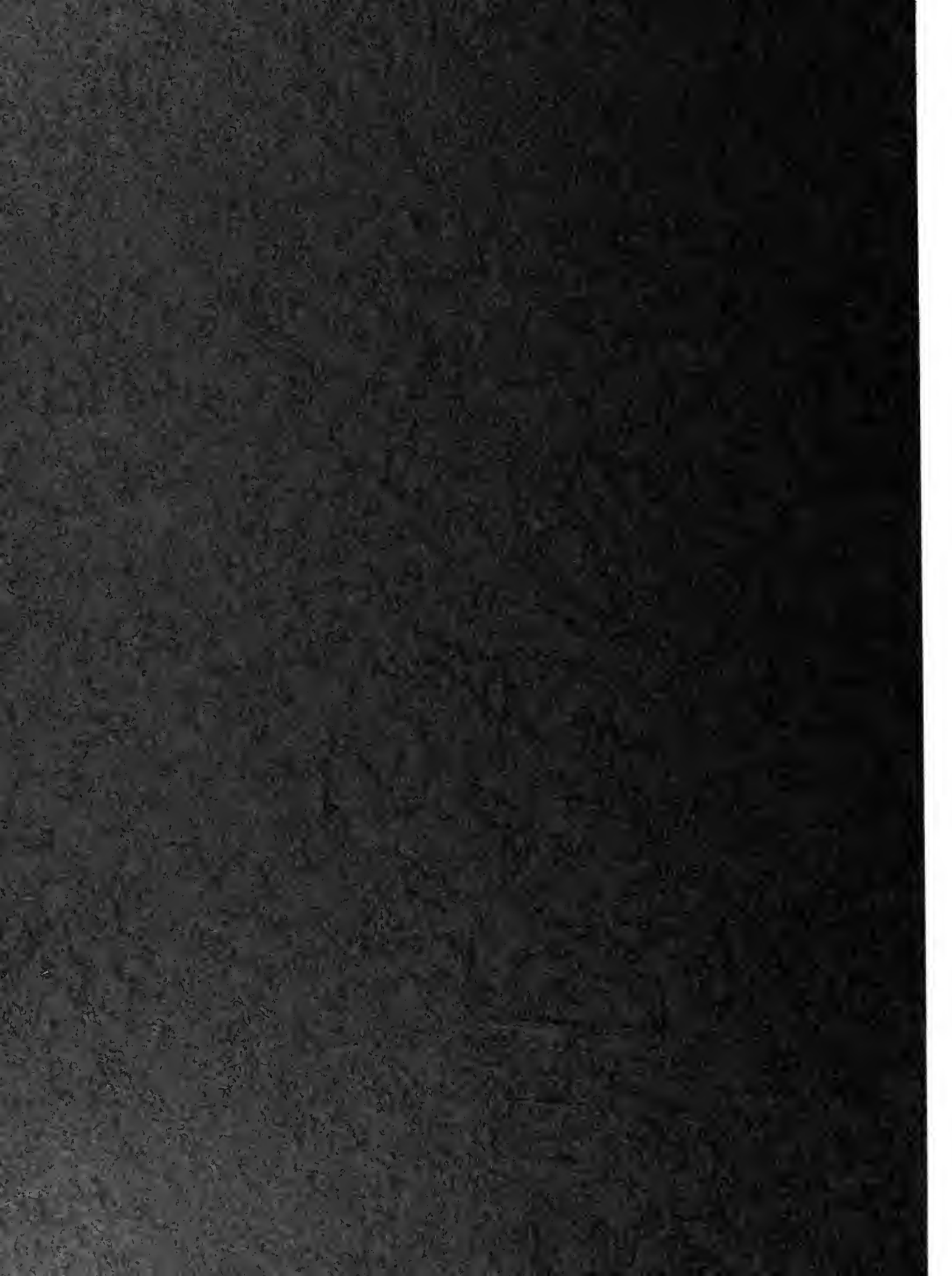
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H. G. KENAGY, Editor



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No. 7

In this Issue:

ARE LABOR TURNOVER RECORDS WORTH WHILE

By

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TO VNU
AIRBORNE

ARE LABOR TURNOVER RECORDS WORTH WHILE

A Criticism of the Present Methods of
Recording and Interpreting
Turnover Date - With
Suggestions for a
More Reliable and
Valuable Plan

By
David R. Craig
Assistant Professor, Personnel Administration,
Carnegie Institute of Technology.

The Bureau of Personnel Research

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FOREWORD

Labor turnover is a popular subject in employment management circles. Since the time some years ago when a few interested individuals drew the attention of employees to the huge cost of high turnover among employers, employment managers have concerned themselves very earnestly with the causes and remedies. In fact most such officials owe their positions to the fact of labor turnover. Discussions, speeches, magazine articles, even books, have dealt with the problem in its many phases - from the social effects of rapid shifting to highly technical formulae for measuring the phenomenon.

Rarely, very rarely, has the study of labor turnover been looked at from the pragmatic standpoint of the total value of results obtained. Professor Craig has established this fact very clearly in the discussion which follows. He points out the fallacies and insufficiencies of ordinary turnover data, and at the same time the waste of effort and money involved in keeping records which have no real value. From an analysis of the actual turnover data in a large department store, he illustrates his criticisms of ordinary records and suggests valuable changes which can be made.

H. G. Kenagy,
Assistant Director.

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ARE LABOR TURNOVER RECORDS WORTH WHILE

Labor Turnover Records To-day.

Five or six years ago labor turnover records began to gain the wide currency which they now enjoy. It was important to notice, especially during the war situation, the costly mobility of labor, and to take every precaution that this shifting should be prevented as far as possible. It was delightful to be able at last to express something about human beings in a mathematical formula.

At first the statement of the turnover in simple percentage figures was the standard method. After raising the question of the method of computing this figure, the standard was adopted of dividing the total number of separations by the average working force; although there were many who thought that the numerator of the fraction should be the number of replacements rather than the number of separations. The separations standard was adopted by the U. S. Department of Labor. Labor turnover percentages are today commonly computed by this method.

Not long afterwards the desirability of analyzing labor turnover figures became apparent. Forms were drafted to simplify the recording of turnover data by causes, and the form now most widely prevalent is the one which was put out by the Library Bureau. It has since been modified by a large number of companies to suit their particular needs. Almost every company that keeps labor turnover records today is using some modification of this original form

The causes of labor turnover are usually classified in some such manner as the following:

Resigned or left of own accord

Better job

Salary or wages

Dissatisfied with work

Unable to get along with superior

Leaving city

Steadier employment

Ill health

Change of vocation

Discharged

Careless

Incompetent

Liquor

Trouble breeder

Misconduct

Stealing or dishonesty

Unreliable

Insubordinate

Physical reasons (sometimes classified under "laid off")

Laid off

Decrease of force

Lack of work

Unavoidable

Injured

Death

Transferred

The standard form for recording turnover data usually prints these reasons across the top of the card (horizontal axis), and down the side (vertical axis) the department numbers or names, (for the monthly and yearly summary by departments), the names of the months (for the monthly recapitulations), or the days of the month, (for the daily recording).

The results obtained by the use of this form have apparently been satisfactory; at any rate, they have continued in use. It is possible to say, as a result of these records, that a certain number of men left department No. 30 because of dissatisfaction with their work, or because of finding a better job, or because of changing their vocations. This classifies the labor turnover and reduces it to simple elements. The causes can then be attacked, and the turnover reduced. Of course, this is the aim of keeping labor turnover records.

THE HISTORY OF THE

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CHARLES THE FIRST

BY

JOHN BURNET

OF

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THE SECOND

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THE HISTORY

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CHARLES

THE

FIRST

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JOHN

BURNET

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If they do not serve this purpose, then they are like any other use-less office encumbrance.

So much for the theory of this form. How about the practice?

What Do The Percentages Mean?

It is proper to raise some questions regarding the simple percentages. Is it always fair to say to Foreman Jones that his labor turnover is higher than that of Foreman Brown, and to hold him to account for that fact? Does this prove that Foreman Brown is a better Foreman? May it not possibly be explained that Foreman Jones lost less men than Foreman Brown, but since he had a much smaller department the denominator of his fraction brought his percentage up beyond Foreman Brown's.

What Do The Causes of Labor Turnover Mean?

Also, it is proper to raise the question: Have labor turnover records, as currently kept, served their purpose faithfully? Has the employment manager been able to point out to the General Manager the weak spots of the personnel policy? Has the information which the employment manager must have from these records been reliable? Have the resigning employees always stated the real reasons for resigning? Have foremen always given the real reasons to the employment manager when discharging an employee?

These are serious questions to raise, because they strike at the only two aspects of labor turnover that are currently studied. If they can be answered satisfactorily, then labor turnover can proceed evenly along its way; if not, then we must consider some revision of our method of studying this industrial phenomenon.

Let us take up first the original aspect of labor turnover,

1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part is devoted to a detailed analysis of the economic situation.

3. The third part is devoted to a detailed analysis of the social situation.

4. The fourth part is devoted to a detailed analysis of the political situation.

5. The fifth part is devoted to a detailed analysis of the cultural situation.

6. The sixth part is devoted to a detailed analysis of the environmental situation.

7. The seventh part is devoted to a detailed analysis of the international situation.

8. The eighth part is devoted to a detailed analysis of the future prospects of the country.

9. The ninth part is devoted to a detailed analysis of the role of the state in the economy.

10. The tenth part is devoted to a detailed analysis of the role of the state in society.

11. The eleventh part is devoted to a detailed analysis of the role of the state in culture.

12. The twelfth part is devoted to a detailed analysis of the role of the state in the environment.

13. The thirteenth part is devoted to a detailed analysis of the role of the state in international relations.

14. The fourteenth part is devoted to a detailed analysis of the role of the state in the future.

15. The fifteenth part is devoted to a detailed analysis of the role of the state in the economy.

16. The sixteenth part is devoted to a detailed analysis of the role of the state in society.

17. The seventeenth part is devoted to a detailed analysis of the role of the state in culture.

18. The eighteenth part is devoted to a detailed analysis of the role of the state in the environment.

19. The nineteenth part is devoted to a detailed analysis of the role of the state in international relations.

20. The twentieth part is devoted to a detailed analysis of the role of the state in the future.

21. The twenty-first part is devoted to a detailed analysis of the role of the state in the economy.

22. The twenty-second part is devoted to a detailed analysis of the role of the state in society.

23. The twenty-third part is devoted to a detailed analysis of the role of the state in culture.

24. The twenty-fourth part is devoted to a detailed analysis of the role of the state in the environment.

25. The twenty-fifth part is devoted to a detailed analysis of the role of the state in international relations.

26. The twenty-sixth part is devoted to a detailed analysis of the role of the state in the future.

27. The twenty-seventh part is devoted to a detailed analysis of the role of the state in the economy.

28. The twenty-eighth part is devoted to a detailed analysis of the role of the state in society.

29. The twenty-ninth part is devoted to a detailed analysis of the role of the state in culture.

30. The thirtieth part is devoted to a detailed analysis of the role of the state in the environment.

and secondly the aspect which was added shortly afterwards.

Comparing Labor Turnover Percentages.

The comparison of percentages between departments and between companies is fraught with dangers. The reduction of the figures to a percentage basis lends them a superficial comparability. But unless the denominators of the fractions are nearly comparable, then the quotients are not strictly comparable. Suppose for instance that we have two departments, one of 100 men, one of 25 men. Such departments exist in every large plant. Each department loses 10 men. The labor turnover is 10 per cent for the large department, and 40 per cent for the small department. Is the foreman of the small department to be charged with a turnover four times as large as the turnover in the large department? This is hardly fair. Furthermore, responsibility for labor turnover hinges on the causes that are given for it and the foreman of the small department may not be wholly responsible.

Comparison of labor turnover between companies is more accurate; with large denominators the quotients become comparable in greater degree. But comparison of labor turnover between companies can serve no conceivably useful purpose unless it be to add to the prestige of one employment manager and detract from that of another. Labor turnover will never be reduced by comparing the figures for last year between companies, either in government reports or in chambers of commerce. To be sure, it is helpful to know whether the adoption of special methods by a particular company has been successful in reducing its labor turnover, and the comparisons between companies may possibly show which company's methods have been successful. But in most cases the usual thought of the employment manager is "I was better or worse than so-and-so."

High
When is Labor Turnover High?

The comparison of labor turnover percentages, then, even when they are arrived at in similar ways, is not specially useful. What can be said of the percentages taken by themselves?

The percentage figure must always be interpreted with reference to some standard. If the turnover is 75 per cent, is that high or low? Is it high or low with reference to what standard? The ideal labor turnover figure is not zero, in spite of the fact that many industrial managers have made a fétich in the past five years of the words "reducing labor turnover". No manager will say that he would be pleased to see his labor turnover disappear entirely, for that would imply a stagnant condition of his business which would be worse, possibly, than a high labor turnover. No standard has ever been set for labor turnover, though we may put down five or ten per cent per year as a tentative ideal, with reasonable assurance that not one company in a thousand will reach it.

Yet this ideal refers only to times of prosperity. In the industrial depression from which we are just emerging, labor turnover, on the basis of separations, rose enormously. Men were being laid off every day, because there was no work for them to do. Only the best men were kept, and sometimes they too had to be released.


Then came the period of starting up again, and in this process, with so many good men out of work and applying for work every day, many companies took advantage of the opportunity to replace even the good men in their employ with better men from the outside, whenever they could be secured. Is it right to say that a low labor turnover, of five to ten per cent, is ideal in such a time?

If a company can better itself by replacing poor men with good men, or replacing good men with better men, it is idle to talk about "reducing labor turnover". In such a time a high labor turnover is an excellent thing -- for the company, if not immediately or remotely so for the men replaced.

Viewing the labor turnover in times of prosperity, the same interpretation holds. If a company, by dint of careful search and selection, discovers a good man, that company is ill-advised if it thinks twice of labor turnover before securing him.

Labor turnover percentages, then, mean nothing by themselves.

They are high with reference to one standard, low with reference to another. The standard which happens to be in operation at any given time depends on general business conditions and the resulting condition of the labor market. Labor turnover should be fairly high in times of depression, low in times of prosperity, if the ideal is to be reached. This will be true until depressions and prosperous periods are brought within control. Since there is no such thing as "normal times" (normal times, you will notice, are always "next year", or "last year"), there is no norm that can be a fixed reference for labor turnover.



Reliability of the Causes of Labor Turnover.

What of the causes of labor turnover? There are two kinds of reasons for human actions. One is the kind which the individual gives as his reason for behaving as he does. Sometimes this is also the real reason. But it is easy to demonstrate that our motives are not always known to us. For example, the business man says that the Soldier Bonus should be defeated because it is wrong to put a price

1. The first part of the report
describes the general situation
of the country and the
state of the economy.
It also mentions the
main problems which
the government is
confronted with.

2. The second part of the report
deals with the results of the
survey conducted in the
different regions of the country.
It shows that the
situation is not very
satisfactory in most
of the regions.
The main reasons for this
are the lack of
investment and the
poor management of the
resources.

3. The third part of the report
contains the conclusions
drawn from the survey.
It states that the
government should
take measures to
improve the
economy and to
solve the problems
mentioned in the
first part of the report.

on patriotism; the ex-soldier points out that the country ought to show its gratitude to its heroes. These are "good" reasons. The other kind of reasons is the "real" reason. The business man will have to pay a tax if the bonus goes through; the soldier will lose money if it doesn't.

How often will "good" reasons and "real" reasons coincide in labor turnover records? Quite often, perhaps; very seldom, perhaps. It is not possible to rely on all of them.

When an employee resigns from a company, he may give any one of the reasons that are listed, and possibly some others. If he is an ordinary employee, he is likely to remember that employment is nowhere very secure, that he may need to come back to his company at a future time. He will therefore want to leave open every avenue of return. Now, if he remarks as he quits that he is resigning because he is dissatisfied with his wages, or dissatisfied with his work, or because he is unable to get along with his superior, these facts are likely to be remembered and held against him the next time he appears at the gate looking for work. It is very easy for him to hide these "real" reasons and say that he "is leaving the city", "has a better job", "is in ill-health", or give any of the other "alibi" reasons that are listed or that occur to him spontaneously.

When a foreman wishes to discharge an employee, he may give any number of reasons in the same manner. A great many of the reasons are verifiable from the records. "Attendance" is one of them. "Dishonesty" is another. The writer recalls a case in which the real reason was not given, and a substitute reason supplied. In a company employing 4500 men, the labor turnover of one department was more than 1000 per cent. It was found, on analyzing the records, that a good

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percentage of the men had been discharged for incompetence, yet the employment manager had been very careful to supply the foreman with tradesman of good ability and considerable experience; some of them had had twenty years experience at their trade, which was longer than the foreman's own relationship to it. It was found, on questioning the men more closely, that the foreman was trying to get non-union men in a trade which was completely unionized. It was an impossibility. In order to avoid the appearance of discrimination, the foreman had set down incompetence as the reason for discharging able men who held union cards. The employment manager can hardly be guided by this type of cooperation.

"Insubordination" is not always a choice "alibi" reason, for the reason that there are always two sides to insubordination, and if a foreman is constantly releasing men because of this reason, he is likely to be criticized keenly on his methods of supervision. If this reason is given, then, it is likely to be the right one.

One Company's results.

Let us examine the records of a particular company for one year, and analyze the causes of separations. The table below is taken from the 1921 records of a department store, and supplies the desired data:

(See next page)

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TABLE NO. I

<u>Reasons for Leaving</u>	<u>Number left</u>	<u>Per cent Resigned</u>	<u>Per cent Dismissed</u>	<u>Per cent total</u>
Married	24	5.7		2.1
Moved away	56	13.0		5.6
Return to School	22	5.2		2.0
Health	44	10.3		4.0
Unable to get along with superior	5	1.1		.5
Dissatisfied with work	14	3.3		1.3
Other position	110	25.8		9.8
Salary	2	.5		.2
No notice	81	19.2		7.1
Stay home	<u>68</u>	<u>15.9</u>		<u>6.1</u>
(Total resigned)	(426)	100.0%		(38.7)
Attendance	21		3.1	1.9
Incompetence	84		12.2	7.4
Dishonesty	8		1.2	.7
Insubordination	14		2.0	1.3
Wrong type	10		1.5	.9
Retired on pension	0		0.0	0.0
Reducing force	248		36.0	22.1
Temporary	<u>302</u>		<u>44.0</u>	<u>27.0</u>
(Total dismissed)	<u>(687)</u>		<u>100%</u>	<u>(61.3)</u>
Total loss	1113			100.0%

In this table, as in the classification of causes of turn-over given on page 2, two general divisions are shown. These correspond to "Reasons given by employees for resigning or quitting" and "Reasons given by foremen or department heads for dismissing or firing employees". These divisions must again be divided into reasons which are reliable and reasons which are not reliable. The resigning employee has every reason not to say that dissatisfaction with wages, dissatisfaction with work, and inability to get along with superior are determining causes for his resignation. If, therefore, he gives any one of these reasons, it may be presumed to be true. He may give any of the other

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reasons instead, if he likes. Of these other reasons, which we shall refer to as "alibi" reasons, some may be correctly stated and may be found to be justified in any given case. But it is important to note that the three reasons which usually operate to cause resignations are the very ones which an employee hesitates to give. These we have every reason to believe, then, if he gives them. We have some cause to doubt the others, and less reason to believe in their reliability. They may be classified as follows:

TABLE NO. 2.

Reasons which are reliable

Married (verifiable)
Unable to get along with superior
Dissatisfied with work
Salary

Reasons which are not reliable

Moved away
Return to school
Health
Other position
No notice
Stay at home

In the same manner, some of the reasons which foremen give are sometimes verifiable and some are not. The reliable and the "alibi" reasons may be classified as follows:

TABLE NO. 3.

Reasons which are reliable

Attendance (verifiable)
Dishonesty
Wrong type
Retired on pension
Insubordination

Reasons which are not reliable

Incompetence
Reducing force
Temporary

Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the control group (CG). The EG was divided into two subgroups: the experimental group (EG) and the experimental group (EG).

On the basis of this discussion, let us reclassify the first summary of causes shown in Table No. 1 above.

In order to make clearer the point at issue, the two causes called "reducing force" and "temporary" have been placed in a separate class in this table, under the heading "partly reliable". The business of a department store is inherently so seasonal that we cannot say these reasons are absolutely unreliable. But they make such good "alibi" reasons that they cannot be called thoroughly reliable.

TABLE NO. 4

<u>Reasons for leaving</u>	<u>Number left</u> <u>(RELIABLE)</u>	<u>Per cent of total</u>
Married	24	2.1%
Unable to get along with superior	5	.5
Dissatisfied with work	14	1.3
Dissatisfied with salary	2	.2
Attendance	21	1.9
Dishonesty	8	.7
Insubordination	14	1.3
Wrong type	10	.9
Retired on pension	0	0.0
Total (reliable)	<u>98</u>	<u>8.9%</u>
<u>(UNRELIABLE)</u>		
Moved away	86	5.6
Return to school	22	2.0
Health	44	4.0
Other position	110	9.8
No notice	81	7.1
Stay at home	68	6.1
Incompetence	84	7.4
Total (unreliable)	<u>465</u>	<u>42.0%</u>
<u>(PARTLY RELIABLE)</u>		
Reducing force	248	22.1
Temporary employment	<u>302</u>	<u>27.0</u>
Total (partly reliable)	<u>550</u>	<u>49.1%</u>
Totals	1113	100.0%

Notice especially those figures which show the total number of separations caused by the reliable reasons, and those caused by the

Journal of Management Education 30(6)

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthal and Whistler (1973).

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• **Aspirin** (ASA) is a non-steroidal anti-inflammatory drug (NSAID) that is commonly used for pain relief and to reduce inflammation. It is also used to prevent blood clots in people at risk of heart disease.

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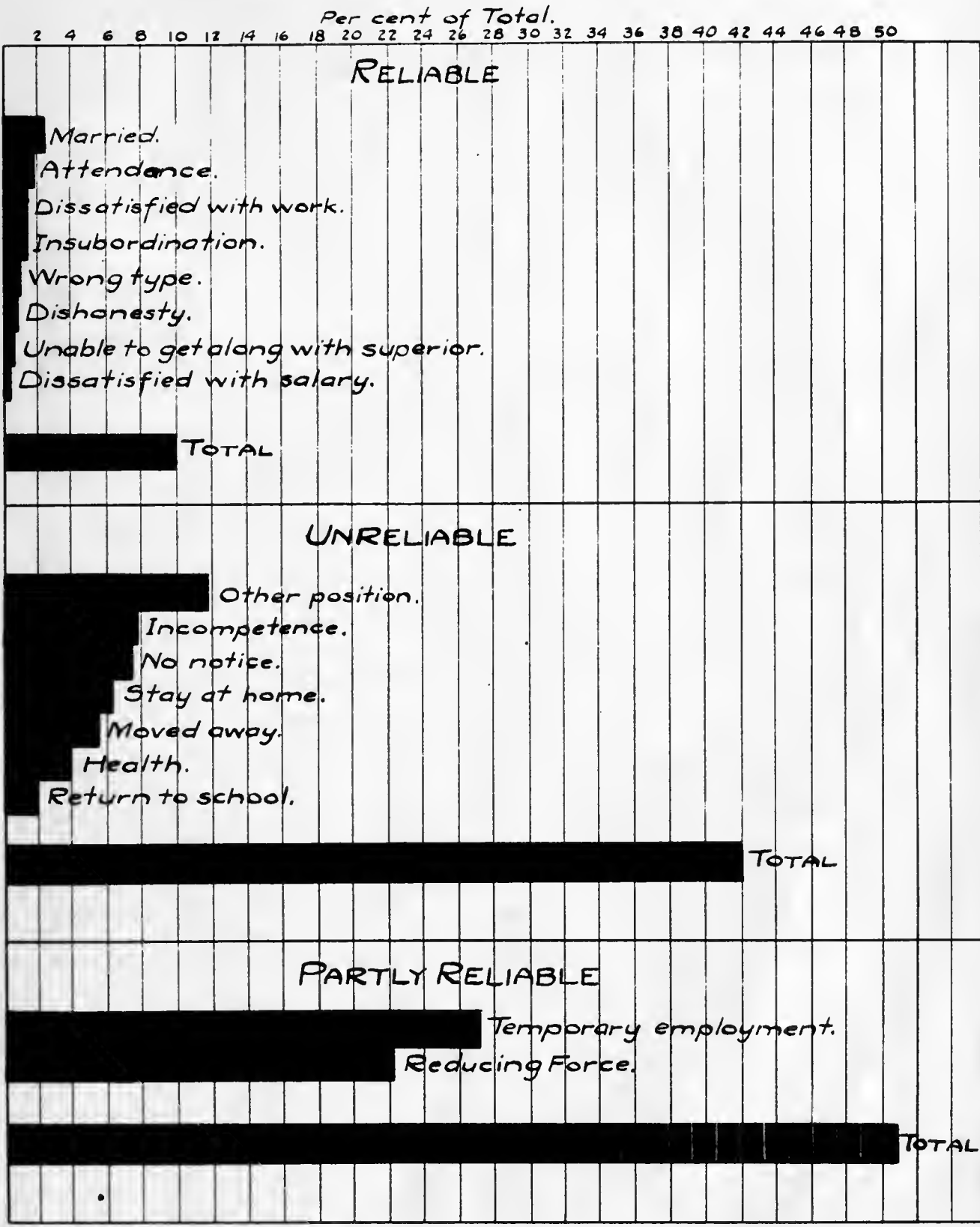
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CHART I.

RELIABILITY ANALYSIS OF REASONS FOR TURNOVER.



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unreliable ones. 8.9 per cent of the separations are caused by reasons of which we are ~~not~~ certain.

To be sure, a large proportion of the labor turnover in this particular case has been caused by lay-offs and the employment of temporary help. We do not know how large that proportion really is, and how much the stated figure must be reduced for unreliability. Possibly 90 per cent is caused by the release of temporary employees and layoffs.

Conclusions

Our labor turnover forms, then, do not record the causes in a trustworthy manner. If the percentages of labor turnover are not to be compared, and are subject to differing interpretations at different seasons, and if the causes given on our forms and by our employees are not as reliable as we should like, is it not proper to ask ourselves, "Is it worth while to keep labor turnover records?"

Other Ways of Analyzing Labor Turnover.

It is without doubt important to record labor turnover; with this view we have no quarrel. The thesis of this paper is that the labor turnover records, as ordinarily kept, consume a great deal more time and clerical labor than the results warrant. There are other ways in which the labor turnover record may be kept which will save much of this time and effort, and yield fully as important results.

The fundamental record includes only those facts regarding labor turnover which are indispensable. These are:

1. The average working force in each department.
2. The number who leave each department (if the turnover is kept on the basis of separations); or the number who are actually replaced within a department (if the turnover is kept on the basis of replacements).
3. The percentage figure which results from dividing (2) by (1).

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This will give the fundamentals. In many cases the departments will have a reasonable labor turnover, and it will not be necessary to consider those departments further. If the turnover in other departments is considered to be too high or too low, depending on the position of the business curve at the time, this can then be investigated by other means. The feature of this plan is that a great deal of unnecessary work is avoided, and only necessary work is done.

In order to analyze further the labor turnover in those departments where it is unreasonably high or low, as the case may be, two or three methods may be adopted. They are as follows:

1. An informal inquiry could be made of the department manager or foreman, asking him to explain any deviation from desirable turnover. This method would be satisfactory only if the foreman can be trusted to cooperate successfully with the employment manager, and is not personally responsible for the turnover because of some trait of character or temperament which makes him an undesirable boss to those under him.

2. The second method takes into consideration age, pay, length of service, home conditions, and a number of other items that affect each employee who leaves, and plots each one of these variables against the other, to see whether there is any general tendency in the department under scrutiny to group two of these variables together in such a manner as to produce undesirable results.*

3. A comparison can be made between those who leave the department and those who stay with it. This can be done by taking a department census of the particular elements named above (age, pay, etc.) and plotting a distribution curve for each type of individual -- the

* This method has been outlined in an article in the May 1921 issue of Industrial Management, entitled "The Analysis of Labor records."

The first of these is the fact that the
Government will not be able to
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maintain its position in the
market for a long time to come.

CHART II

Interrelations of Turnover Data.

Reasons for Leaving:

Dissatisfied with pay
Dissatisfied with Foreman
Better job
Leaving city
Reason not known
Incompetent
Insubordination

Length
of
Service

Length of Service							Age		Pay		Marital Status	Home Conditions		Dependents				Source																			
0	1 Week	1 Week - 4 Weeks	1 Month - 3 Months	4 Months - 6 Months	7 Months - 12 Months	1 Year - 2 Years	3 Years - 5 Years	0 - 18	19 - 22	23 - 26	27 - 30	31 - 35	36 - 40	\$16 - \$20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	Single	Married	Live with parents	Board	Rent Home	Own Home	No Dependents	1	2	3	4	Unsolicited	Friend of Employee	Agency	Advertising	Total		
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4 Mos. - 6 Mos.																																				20	
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3 Years - 5 Years																																				1	
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Total, Source Column																				35	12	30	23														

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type that causes the turnover, and the type that stays with the company. Thus we would have between the two groups one comparison on "pay", another on "age", etc. This would probably involve considerable clerical labor. But if it is possible to make any generalizations at all, they ought surely to be produced from comparing several aspects of the two groups. If there is any difference between the group that stays and the group that leaves, it will be brought out by this method.

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